

What is claimed is:

CLAIMS

- 5 1. A cable, comprising:
a plurality of transmission media;
a conductive core having a surface defining channels within which each of the
plurality of transmission media are individually disposed; and
an outer jacket maintaining the plurality of data transmission media in position
10 with respect to the core.
- 15 2. The cable of claim 1, wherein the channels of the conductive core are separated by
fins, the cable further comprising:
a conductive shield covering the channels and in contact with the fins.
- 20 3. The cable of claim 1, wherein the conductive core includes a central cavity.
4. The cable of claim 3, further comprising a fiber optic element disposed within the
central cavity.
- 25 5. The cable of claim 3, further comprising a drain wire disposed within the central
cavity.
6. The cable of claim 1, wherein the conductive core is formed principally of a solid
fluoropolymer.
- 30 7. The cable of claim 1, wherein the conductive core is formed principally of a
foamed fluoropolymer.
8. The cable of claim 1, wherein the conductive core is formed principally of
polyvinyl chloride.

9. The cable of claim 8, wherein the polyvinyl chloride is foamed.
10. The cable of claim 8, wherein the polyvinyl chloride is solid.
- 5 11. The cable of claim 1, wherein the conductive core is formed of any two or more of a solid fluoropolymer, a foamed fluoropolymer, solid polyvinyl chloride and foamed polyvinyl chloride.
- 10 12. A cable, comprising:
a plurality of transmission media radially disposed about a finned element whose fins electromagnetically shield each of the plurality of transmission media from each other of the plurality of transmission media.
- 15 13. The cable of claim 12, further comprising:
a conductive shield disposed about the cable.
- 20 14. The cable of claim 13, wherein the conductive shield is in contact with the fins of the finned element.
- 25 15. The cable of claim 12, wherein the finned element is a fire resistant plastic.
16. The cable of claim 15, wherein the fire resistant plastic includes at least one of the group of a solid fluoropolymer, a foamed fluoropolymer, solid polyvinyl chloride, foamed polyvinyl chloride, a solid polyolefin and a foamed polyolefin.
- 30 17. A method of producing a cable, comprising steps of:
passing a plurality of transmission media and a core through a first die which aligns the plurality of transmission media with surface features of the core and prevents twisting motion of the core;
bunching the aligned plurality of transmission media and core using a second die which forces each of the plurality of transmission media into contact with the surface features of

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the core which maintain a spatial relationship between each of the plurality of transmission media;

twisting the bunched plurality of transmission media and core to close the cable;

and

jacketing the closed cable.

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The method of claim ~~17~~, further comprising the steps of:

before passing the transmission media and the core through the first die, passing the transmission media and the core through a third die which generally centers the core relative to the plurality of transmission media.

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The method of claim ~~18~~ wherein the step of passing the transmission media and the core through the third die further comprises:

extruding the core at a center position relative to the plurality of transmission media.

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The method of claim ~~17~~, wherein the step of passing further comprises:

extruding the core so that the surface features thereof align with the plurality of transmission media.